

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: T. KUTSUNA, et al.
Serial No.: 10/602,637
Filed: JUNE 25, 2003
Title: FUEL SYSTEM HAVING EXCELLENT GASOLINE BARRIER
PROPERTY
Group AU: 1794
Examiner: Marc A. Patterson
Confirm. No.: 1073

REPLY BRIEF

Mail Stop: APPEALS

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

January 4, 2010

SIR:

Appellants submit the following Remarks in response to the Examiner's Answer dated November 2, 2009, in connection with the above-identified application.

Initially, the undersigned notes the new ground of rejection of claim 23, set forth on pages 3 and 4 of the Examiner's Answer dated November 2, 2009. Pursuant to 37 CFR 41.39(b)(2), Appellants request that the appeal be maintained, and in the following this Reply Brief addresses the new ground of rejection in Arguments pursuant to 37 CFR 41.37(c)(1)(vii), and also follows the other requirements of a Brief as set forth in 37 CFR 41.37(c), insofar as the new ground of rejection requires a different response than that in the Brief on Appeal filed June 10, 2009, as amended by the Response dated July 20, 2009.

Applicants also submit additional Arguments, subsequent to the Response to the new grounds of rejection, in response to contentions by the Examiner concerning the rejection of claims 1, 2, 6, 8, 10-14, 17, 18, 20, 22 and 24.

Response to New Grounds of Rejection:

Sections of the Brief on Appeal for satisfying 37 CFR 41.37(c)(1)(i)-(v) and (viii)-(x) as in the Brief on Appeal submitted June 10, 2009, and Response filed July 20, 2009, remain the same, and are incorporated herein by reference.

(vi) GROUND OF REJECTION TO BE REVIEWED ON APPEAL:

The first ground of rejection presented for review is the same as that set forth in the Brief on Appeal filed June 10, 2009.

In light of the new ground of rejection of claim 23, a second ground of rejection presented for review is the rejection of claim 23 under 35 USC 103(a) as unpatentable over the teachings of the U.S. patents to Gerdes, et al. (No. 4,719,135) in view of Tashiro, et al. (No. 3,704,229), Huang, et al. (No. 3,683,044), and Watanabe, et al. (No. 5,474,853).

(vii) ARGUMENTS:

Arguments in connection with the rejection of claims 1, 2, 6, 8-22, 24 and 25 under 35 USC 103(a) as set forth on pages 11-31 of the Brief on Appeal filed June 10, 2009, remain the same, and are incorporated herein by reference in their entirety.

Rejection of claim 23 under 35 USC 103(a) as unpatentable over the U.S. patents to Gerdes, et al. (No. 4,719,135) in view of Tashiro, et al. (No. 3,704,229) and Watanabe, et al. (No. 5,474,853):

It is respectfully submitted that the combined teachings of Gerdes, et al., Tashiro, et al., Huang, et al. and Watanabe, et al. would have neither taught nor would have suggested the subject matter claimed in claim 23.

Gerdes, et al., Huang, et al. and Tashiro, et al. have been previously discussed.

Watanabe, et al. discloses a resin composition and a molded article formed therefrom, which is excellent in heat resistance, rigidity, surface smoothness and adhesion to a coating composition, the resin composition comprising an MX nylon which is formed from xylylenediamine and specified aliphatic dibasic acid, a modified polyphenylene ether resin, a fibrous inorganic filler having an average fiber diameter of 10 μm or less, a powdery inorganic filler having an average particle diameter of 10 μm or less, an epoxy resin, and a copper compound and/or a powdery phenolic resin. Note column 2, line 57, through column 3, line 20. This patent discloses a lamp reflector obtained by molding this resin composition and coating the composition with a metal. See column 3, lines 21-24.

It is emphasized that Watanabe, et al. discloses a resin composition, without any disclosure therein of a fuel system, and, in particular, without any disclosure therein of a coating layer which is a barrier layer for gasoline. In particular, it is

respectfully submitted that Watanabe, et al. provides no disclosure at all with respect to the resin composition described therein being used in an article having a barrier layer for gasoline. It is respectfully submitted that one of ordinary skill in the art concerned with in Gerdes, et al., would not have looked to the teachings of Watanabe, et al., in view of differences in technology and differences in problems addressed by the two references.

Even assuming, arguendo, that the teachings of Gerdes, et al., Tashiro, et al., Huang, et al. and Watanabe, et al. were properly combinable, it is respectfully submitted that such combined teachings would have neither disclosed nor would have suggested such a fuel system as in present claim 23, having the recited coating layer with the gasoline permeability coefficient thereof, formed by curing an epoxy resin composition including the epoxy resin and the epoxy resin curing agent as in the present claims, and, moreover, where the coating layer contains skeletal structure represented by the formula (1) in an amount thereof as in the present claims, and advantages due thereto, or the gasoline permeability coefficient of the coating layer as in the present claims, when such coating layer is formed by curing an epoxy resin composition that includes an epoxy resin having a glycidylamine part derived from 1,3-bis(aminomethyl)-cyclohexane.

In connection with the rejection of claim 23, as well as in connection with the rejection of claims 1, 2, 6, 8-22, 24 and 25, only the teachings of Gerdes, et al. is directed to a fuel impervious polymeric article. The other applied references, Tashiro, et al., Huang, et al. and Watanabe, et al., do not relate at all to materials for fuel containers or, in general, fuel barriers. Absent hindsight use of Appellants' original disclosure, which hindsight use is improper under the guidelines of 35 USC 103, it is respectfully submitted that the combined teachings of the applied

references would not have disclosed, nor would have suggested, use of materials as in the secondary references of Tashiro, et al., Huang, et al. and Watanabe, et al., for a fuel tank or fuel canister as in Gerdes, et al., and particularly in connection with also providing a coating layer, which is a barrier layer for gasoline, having a gasoline permeability coefficient of $2 \text{ g}\cdot\text{mm}/\text{m}^2\cdot\text{day}$ or less at 60°C at a relative humidity of 60% RH, as in all of the present claims.

In the Examiner's Answer dated November 2, 2009, the Examiner sets forth reasons in the last paragraph on page 5 and in the first paragraph on page 6, as to why one of ordinary skill in the art would have utilized the teachings of Tashiro, et al. and of Huang, et al. with the teachings of Gerdes, et al.; and in the third paragraph on page 3 of the Examiner's Answer, under the new grounds of rejection, the Examiner sets forth why one of ordinary skill in the art would have utilized the teachings of Watanabe, et al. together with the teachings of Gerdes, et al., Tashiro, et al. and Huang, et al. However, it is again emphasized that Gerdes, et al. is directed to a fuel impervious polymeric article, including an epoxy-based fuel resistant coating layer. Again emphasizing that none of Tashiro, et al., Huang, et al. or Watanabe, et al. relate to fuel containers, and importance of epoxy-based fuel resistant coatings in Gerdes, et al., it is respectfully submitted that one of ordinary skill in the art concerned with in Gerdes, et al., and/or in connection with the presently claimed invention, would not have looked to the teachings of the secondary references in connection with fuel resistant coatings.

In view of the foregoing, as well as in view of the Evidence submitted with the Response filed July 20, 2009, and contentions in the Brief on Appeal filed June 10, 2009, it is respectfully submitted that the combined teachings of the references as applied by the Examiner would have neither disclosed nor would have suggested the

presently claimed subject matter. It is respectfully submitted that the teachings of Tashiro, et al., Huang, et al. and Watanabe, et al. would not have been properly combinable with the teachings of Gerdes, et al. That is, it is respectfully submitted that these references are directed to non-analogous arts, being in different fields of technology and addressing different problems; and that only through hindsight use of Appellants' disclosure, which hindsight use is improper under the requirements of 35 USC 103, would one of ordinary skill in the art have combined the teachings of Tashiro, et al. and of Huang, et al., or of Tashiro, et al., Huang, et al. and Watanabe, et al., with the teachings of Gerdes, et al.

Furthermore, even assuming, arguendo, that the teachings of the references as applied by the Examiner were properly combinable, such combined teachings would have neither disclosed nor would have suggested the presently claimed fuel system, including the recited coating layer that has a gasoline permeability coefficient as in the present claims, or other features of the present invention as discussed in the paragraph bridging pages 34 and 35 of the Brief on Appeal filed June 10, 2009.

In addition, Appellants rely on the evidence as discussed in the first full paragraph on page 35 of the Brief on Appeal filed June 10, 2009, as showing unexpectedly better results achieved by the fuel system of the present invention.

In view of all of the foregoing, in the Brief on Appeal filed June 10, 2009, the Evidence Appendix submitted July 20, 2009, and the contentions made herein, it is respectfully submitted that the Examiner errs in the Final rejection of claims in the Office Action mailed December 10, 2008, and the Honorable Board is respectfully requested to correct this error by reversing the rejection in due course.

Appellants request any shortage in fees due in connection with the filing of this paper be charged to the Deposit Account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (case 396.42795X00), and credit any excess payment of fees to such Deposit Account.

Respectfully submitted,

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